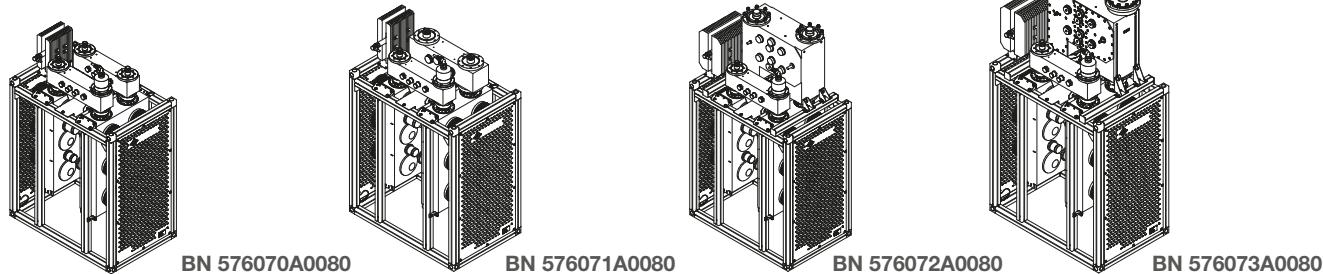
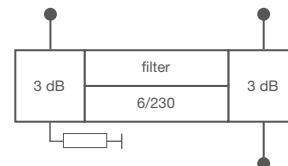


CCS UHF CIB Combiners

- CCS compact design
- Integrated mask filters for DTV
- Adjacent channel operation
- For 6, 7 and 8 MHz channel bandwidth
- Temperature compensated
- Tuneable within the whole UHF range



Multi Channel
Combiners

Part Number	BN 576070A0080	BN 576071A0080	BN 576072A0080	BN 576073A0080																																															
Frequency range		470 - 790 MHz																																																	
Channel spacing		≥ 0																																																	
Narrowband input		3 1/8" EIA male																																																	
Filter type integrated cavities/size		6/230 ≡ BN 616669																																																	
Temperature stability		$\leq 2 \text{ kHz} / \text{K}$																																																	
Harmonics attenuation		$\geq 50 \text{ dB}$ for $f \leq 800 \text{ MHz}$																																																	
DTV mask filtering	DVB-T @ 8 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)	ISDB-T @ 6 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)		ATSC 1.0 @ 6 MHz ($\hat{U}/U_{\text{rms}}=11 \text{ dB}$)																																															
Average input power	$\leq 17 \text{ kW}$	$\leq 13.5 \text{ kW}$		$\leq 13.5 \text{ kW}$																																															
Tuning instruction	AS6303	AS6365		AS6308																																															
Insertion loss & mask filtering (alternative tuning on request)	<table border="0"> <tr> <td>470 MHz</td> <td>786 MHz</td> <td>470 MHz</td> <td>785 MHz</td> <td>470 MHz</td> <td>785 MHz</td> </tr> <tr> <td>f_0</td> <td>$\leq 0.30 \text{ dB}$</td> <td>$\leq 0.4 \text{ dB}$</td> <td>$\leq 0.4 \text{ dB}$</td> <td>$\leq 0.55 \text{ dB}$</td> <td>$\leq 0.45 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 3.805$</td> <td>$\leq 0.75 \text{ dB}$</td> <td>$\leq 0.9 \text{ dB}$</td> <td>$f_0 \pm 2.79$</td> <td>$\leq 0.85 \text{ dB}$</td> <td>$\leq 1.0 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 3.885$</td> <td>$\leq 0.85 \text{ dB}$</td> <td>$\leq 1.0 \text{ dB}$</td> <td>$f_0 \pm 3.0$</td> <td>$\geq 2 \text{ dB}$</td> <td>$f_0 \pm 3.5$</td> </tr> <tr> <td>$f_0 \pm 4.2$</td> <td></td> <td>$\geq 4 \text{ dB}$</td> <td>$f_0 \pm 3.15$</td> <td>$\geq 8 \text{ dB}$</td> <td>$f_0 \pm 4$</td> </tr> <tr> <td>$f_0 \pm 6$</td> <td></td> <td>$\geq 20 \text{ dB}$</td> <td>$f_0 \pm 4.5$</td> <td>$\geq 23 \text{ dB}$</td> <td>$f_0 \pm 6$</td> </tr> <tr> <td>$f_0 \pm 12$</td> <td></td> <td>$\geq 40 \text{ dB}$</td> <td>$f_0 \pm 9$</td> <td>$\geq 48 \text{ dB}$</td> <td>$f_0 \pm 9$</td> </tr> <tr> <td></td> <td></td> <td></td> <td>$f_0 \pm 15$</td> <td>$\geq 50 \text{ dB}$</td> <td></td> </tr> </table>	470 MHz	786 MHz	470 MHz	785 MHz	470 MHz	785 MHz	f_0	$\leq 0.30 \text{ dB}$	$\leq 0.4 \text{ dB}$	$\leq 0.4 \text{ dB}$	$\leq 0.55 \text{ dB}$	$\leq 0.45 \text{ dB}$	$f_0 \pm 3.805$	$\leq 0.75 \text{ dB}$	$\leq 0.9 \text{ dB}$	$f_0 \pm 2.79$	$\leq 0.85 \text{ dB}$	$\leq 1.0 \text{ dB}$	$f_0 \pm 3.885$	$\leq 0.85 \text{ dB}$	$\leq 1.0 \text{ dB}$	$f_0 \pm 3.0$	$\geq 2 \text{ dB}$	$f_0 \pm 3.5$	$f_0 \pm 4.2$		$\geq 4 \text{ dB}$	$f_0 \pm 3.15$	$\geq 8 \text{ dB}$	$f_0 \pm 4$	$f_0 \pm 6$		$\geq 20 \text{ dB}$	$f_0 \pm 4.5$	$\geq 23 \text{ dB}$	$f_0 \pm 6$	$f_0 \pm 12$		$\geq 40 \text{ dB}$	$f_0 \pm 9$	$\geq 48 \text{ dB}$	$f_0 \pm 9$				$f_0 \pm 15$	$\geq 50 \text{ dB}$			
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Group delay variation	$\Delta\tau \leq 350 \text{ ns}$	$\Delta\tau \leq 500 \text{ ns}$		$\Delta\tau \leq 200 \text{ ns}$																																															
Wideband input	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male																																															
Average input power	$\leq 17.5 \text{ kW}$	$\leq 33 \text{ kW}$	$\leq 60 \text{ kW}$	$\leq 60 \text{ kW}$																																															
	Attention: The power at the wideband input must be reduced by 50 % of the power fed into the narrowband input.																																																		
DTV mask filtering		No																																																	
Insertion loss		$\leq 0.1 \text{ dB}$ (non adjacent)																																																	
Output	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male																																															
Peak output voltage	$\leq 12.5 \text{ kV}$	$\leq 15.5 \text{ kV}$	$\leq 19.5 \text{ kV}$	$\leq 24 \text{ kV}$																																															
Average output power	—	—	$\leq 60 \text{ kW}$	—																																															
Isolation between inputs		$\geq 35 \text{ dB}$																																																	
VSWR (one WB channel)		≤ 1.06																																																	
Dimensions (L x W x H) mm	900 x 570 x 1400		900 x 570 x 1600	900 x 570 x 1650																																															
Weight	$\approx 160 \text{ kg}$	$\approx 170 \text{ kg}$	$\approx 220 \text{ kg}$	$\approx 245 \text{ kg}$																																															
Environmental conditions	For limitations see „Environmental Conditions for Broadcast Products“.																																																		